26th International Conference on Distributed Computer and Communication Networks (DCCN 2023) – AGENDA

September 25 (Monday) – September 28 (Thursday), 2023

Organizers

V.A. Trapeznikov Institute of Control Sciences of RAS (ICS RAS, Russia, Moscow)

Peoples' Friendship University of Russia (RUDN University), Moscow, Russia

Tracks

Track A. Computer and Communication Networks: Architecture, Protocols and Technologies. Chair: Vladimir Vishnevsky. Co-chair: Dmitry Kozyrev.
Track B.Modeling of Distributed Systems and Networks. Chair: Konstantin Samouylov. Co-chair: Irina Kochetkova.
Track C. Distributed Systems Applications. Chair: Andrey Koucheryavy. Co-chair: Ammar Muthanna.

	TIME (Moscow time)	DAY 1: OPENING, PLENARY SESSION Small conference hall - Малый конференц-зал (МКЗ)
Monday, September 25, 2023	10:00–11:00	**REGISTRATION** Reception, Ground floor
	11:00–11:15	**Conference Opening** (МКЗ) **Chairman: *Vladimir Vishnevsky,*** ICS RAS
	11:15–11:30	**Welcome Speech: *Dmitry Novikov*** , Director, ICS RAS **Welcome Speech: *Konstantin Samouylov,*** Director, AMCT Institute, RUDN; ***Anatoly Nazarov,*** Professor, Tomsk State University
	11:30–12:10	**Holographic telepresence services for public communication networks** ***Andrey Koucheryavy*** **,** The Bonch-Bruevich St. Petersburg State University of Telecommunications, Russia
	12:10–12:30	**Coffee break**
	12:30–13:10	**Towards Ultra-High Reliability of Wi-Fi 8** ***Evgeny Khorov*** **,** IITP RAS, Russia
	13:10–14:00	**Cybersecurity Benefits of Digital Twins for Intelligent Critical Infrastructures** ***Mohammad Hammoudeh*** **,** King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia
	14:00–15:00	**Break**
	15:00–16:00	**Numerical Study of Queuing-Inventory Systems with Catastrophes under Base Stock Policy** ***Agassi Melikov*** **,** Institute of Control Systems, National Academy of Science, Azerbaijan
	16:00–17:00	**Power and Performance in Parallel Processing** ***Alexander Rumyantsev*** **,** Institute of Applied Mathematical Research, Karelian Research Center of the Russian Academy of Sciences, Russia

	TIME (Moscow time)	DAY 2: Track sessions		
	10:00–11:00	**REGISTRATION** (Reception, Ground floor)		
Tuesday, September 26, 2023		**A.1.1. Computer and Communication Networks: Architecture, Protocols and Technologies** *Chairs: Prof. V.Vishnevsky, Prof. K.Samouylov* **Room 6**	**B.1.1. Analytical modeling of Distributed Systems and Networks** *Chairs: Prof. A.Dudin, Dr. I.Kochetkova* **Room 9**	**C.1.1. Distributed Systems Applications** *Chairs: Prof. A.Koucheryavy, Dr. A.Muthanna* **Room 10**
	11:00–11:20	**Dmitriy Kim, A.M. Turlikov, N.V. Markovskaya** Minimization of peak age of information in LoRaWAN-based monitoring systems (ID 1974)	**Vidyottama Jain** A Semi-Markov Approach for Reliability Analysis of High-Altitude Platforms	**Ammar Muthanna, Andrey Koucheryavy** Revolutionizing H2M Interaction: Telepresence System Enabling Sign Language Expansion for Individuals with Disabilities (ID 2167)
	11:20–11:40	**Nikita Mittal** Enhancing power efficiency through semi-markov modeling of Narrowband Internet of Things devices in 5G networks (ID 1926)	**Greeshma Joseph, Varghese Jacob, Achyutha Krishnamoorthy** On queuing systems with N policy and various server activation strategies (ID 1881)	**Artem Volkov, Andrey Koucheryavy, Daniil Svechnikov** Efficient Transmission of Holographic Images: A Novel Approach Toward 6G Telepresence Services (ID 2165)
	11:40–12:00	**Ilya Levitsky, Sergei Tutelian, Aleksey Kureev, Evgeny Khorov** Semi-orthogonal Precoder for Improving Throughput and Fairness in Downlink NOMA-MIMO Systems (ID 1973)	**Selvamuthu Dharmaraja, Anisha Aggarwal, Priyanka Kalita** Stochastic Modelling for Energy Efficiency in LTE-A and LTE-5G Networkss (ID 2239)	**Aleksandr Sokolov, Andrey Larionov, Amir Mukhtarov** Distributed system for scientific and engineering computations with problem containerization and prioritization (ID 2157)
	12:00–12:20	**Aleksander Kalachikov** Numerical Evaluation of the Optimal Precoder Design for Mobile Users in MISO System (ID 1983)	**Alexander Dudin, Olga Dudina** Model of operation of a cell of a mobile communication network with adaptive modulation schemes and batch arrivals (ID 1905)	**Vilmen Abramian, Ivan Fedotov, Andrey Larionov** Overview of research works on applications of UHF RFID on vehicles for data transmission (ID 2086)
	12:20–12:40	**Mohammed Muthanna** Influence of Access Points' Height and High Signal Relation in WLAN Fingerprinting-Based Indoor Positioning Systems' Accuracy (ID 2161)	**Vladimir Vishnevsky, Olga Semenova, Van Hieu Nguyen, Minh Cong Dang** Batch Service Polling System: Mathematical and Simulation Modeling (ID 2010)	**Sergey Melnikov, Konstantin Samouylov, Andrey Zyazin** On the identification of a finite automaton by its input and output sequences in case of distortions (ID 1891)
	12:40–13:00	**Mark Bulygin, Dmitry Namiot** On Reports in Open Transport Data Analysis Platform (ID 1876)	**Vladimir Vishnevsky, Olga Semenova, Minh Cong Dang, Van Hieu Nguyen** Multiphase queuing system with blocking and single common orbit retrial queue with limited buffer (ID 2021)	**Konstantin Kostiukhin, Vladimir Galatenko** Применение аппаратных счетчиков производительности для выявления угроз информационной безопасности приложений (ID 1874)
	13:00–13:30	**Coffee break**		

Tuesday, September 26, 2023		A.1.2. Computer and Communication Networks: Architecture, Protocols and Technologies *Chairs: Prof.Yu.Gaidamaka, Dr. D.Ostrikova* Room 6	B.1.2. Analytical modeling of Distributed Systems and Networks *Chairs: Prof. D.Efrosinin, Prof. János Sztrik* Room 9	C.1.2. Distributed Systems Applications *Chairs: Prof. D.Namiot, Prof. D.Kulyabov* Room 10
	13:30–13:50	**Elena Zhbankova, Varvara Manaeva, Ekaterina Markova, Yuliya Gaidamaka** The Peak Age of Information of URLLC service in 5G NR Systems (ID 1880)	**Dmitry Efrosinin, Vladimir Vishnevsky, Natalia Stepanova** A Machine-learning approach to queue length estimation using tagged customers emission (ID 2035)	**Li Huayui, Vasily Kostyumov, Oleg Pilipenko, Dmitry Namiot** On the Evasion Attack Detector (ID 1914)
	13:50–14:10	**Olga Morozova, Margarita Orlova, Nikita Naumov, Leonid Abrosimov** Towards a new format of datasets in traffic analysis (ID 1848)	**Ádám Tóth, János Sztrik** The simulation of finite-source retrial queues with two-way communication to the orbit using a backup server (ID 1861)	**Junzhe Song, Dmitry Namiot** On the Machine Learning Models Inversion Attack Detector (ID 1916)
	14:10–14:30	**Daniil Yarchuk, Margarita Orlova, Leonid Abrosimov** Решение для аутентификации устройств пользователей в корпоративной беспроводной сети университета с помощью механизма IEEE 802.1x (ID 1837)	**Stepan Rogozin** The regenerative stability analysis of some vacation models (ID 1895)	**Eugene Yu. Shchetinin, Leonid Sevastianov, Anastasia Glushkova, Anastasia Demidova** On classification of the cytological images of leukocytes with transfer deep learning models (ID 1857)
	14:30–14:50	**Abdukodir Khakimov, Vyacheslav Begishev, Evgeny Mokrov, Anatoliy Prikhodko, Alexander Shurakov, Gregory Goltsman** Characterizing Blockage Statistics of Reflected Propagation Paths in sub-THz Indoor Communications (ID 1859)	**Vladimir Bogatyrev, Stanislav Bogatyrev, Anatoly Bogatyrev** Adaptive redistribution of traffic heterogeneous in acceptable delays with transmission replication during route reconfiguration in nodes connecting segments of multipath networks (ID 1897)	**Olga Kochueva, Ruslan Akhmetzianov** Machine Learning-Based Models for the Compressibility Factor of Natural Gas (ID 1991)
	14:50–15:10	**Svetlana Dugaeva, Vyacheslav Begishev, Nikita Stepanov** Application Identification in mmWave/THz Systems via Machine Learning Algorithms (ID 1872)	**Vladimir Bogatyrev, Anatoly Bogatyrev, Stanislav Bogatyrev** Readiness for timely execution of requests in fault-tolerant clusters with information recovery based on replication and backup (ID 1900)	**Н.И.Вьюкова, Vladimir Galatenko, Anton Pavlov, Sergej Samborskij** Поиск корректного отображения параллельных вычислений на систему с коммутационной средой RapidIO методами ЦЛП (ID 1884)
	15:10–15:30	**Alexandr Syrtsov, Ekaterina Bobrikova, Irina Yartseva, Vsevolod Shorgin, Yuliya Gaidamaka** К прогнозированию качества радиоканала между БПЛА в рое с применением многослойной нейронной сети (ID 1976)	**Dzmitry Kopats** G-сеть состоящая из ненадёжных систем с контрольными и карантинными очередями и возможностью перемещения отрицательных заявок между системами сети (ID 1933)	**Andrey Kostogryzov** Анализ полноты и актуальности выходной информации в распределенных компьютерных и телекоммуникационных системах, обеспечивающих проведение избирательных кампаний (ID 1982)
	15:30–15:50	**Break**		**Aleksandr Soldatenko, Daria Semenova, Ellada Ibragimova** About heuristic algorithm for Correlation Clustering problem solving (ID 1871)
	15:50–16:00			

Tuesday, September 26, 2023			**B.1.3. Analytical modeling of Distributed Systems and Networks** ***Chair: Prof. N.Markovich, Prof. A.Mandel*** **Room 9**	
	16:00–16:20		**Anna Vetkina, Людмила Нежельская** Maximum Likelihood Estimation of the Dead Time Distribution Parameter in Recurrent Semi-Synchronous Doubly Stochastic Events Flow (ID 2033)	
	16:20–16:40		**A. Kozhan, Viktor Laptin, Alexander Mandel** Myopic Inventory Control with Returns in Case of Uncertainty: Adaptive Algorithms (ID 1877)	
	16:40–17:00		**Natalia Markovich, Maksim Ryzhov** Information Spreading in Non-homogeneous Evolving Networks with node and edge deletion (ID 1817)	
	17:00–17:20		**Oleg Lukashenko** On the variance reduction methods for estimating the reliability of the multi-phase Gaussian degradation system (ID 1890)	
	17:20–17:40		**Irina Peshkova** Об экстремальном индексе стационарного времени ожидания в системах GI/G/1c неоднородными входными потоками (ID 1898)	

	TIME (Moscow time)	DAY 3: Track sessions		
Wednesday, September 27, 2023		**A.2.1. Computer and Communication Networks: Architecture, Protocols and Technologies** ***Chairs: Prof. K.Vytovtov, Prof . E.Barabanova*** **Room 6**	**B.2.1. Analytical modeling of Distributed Systems and Networks** ***Chairs: Prof. A.Nazarov, Prof. S.Moiseeva*** **Room 9**	
	11:00–11:20	**Anna Fominykh, Andrei Ovchinnikov** Estimation of MAP component decoding of product codes in two-state channels (ID 1879)	**Anatoly Nazarov**, Svetlana Paul Асимптотические методы исследования систем с деградацией обслуживания	
	11:20–11:40	**Alexander Shiroky** Risk management in the design of computer network topology (ID 1917)		
	11:40–12:00	**Andrey Nistratov** Об архитектурных решениях, ориентированных на прогнозирование и рациональное управление рисками в системной инженерии (ID 1889)	**Любовь Задиранова** Математическая модель двухэтапного производственного процесса в виде двухфазной СМО с двумя входящими пуассоновскими потоками и обратной связью (ID 1869)	
	12:00–12:20	**Andrey Nistratov** Вероятностное моделирование сопровождаемого цифрового двойника фрагментов магистральной трубопроводной сети для упреждающего противодействия природным угрозам (ID 1887)	**Artem Podgainov, Maria Shklennik** Метод марковского суммирования для исследования суммарного потока повторных обращений в многофазной системе массового обслуживания с обратной связью (ID 1885)	
	12:20–12:40	**Alexey Abramov, Konstantin Mikhailov** Мониторинг и анализ трафика сетей передачи данных в крупных распределенных инфраструктурах на основе технологии NetFlow (ID 1860)	**Ekaterina Pakulova, Svetlana Moiseeva, Alexander Moiseev, Светлана Чижикова** Модель гетерогенной системы передачи данных с очередью и переключением каналов (ID 1980)	
	12:40–13:00	**Elena Gibadullina** Automated planning for service configuration management in IP/MPLS networks (ID 1986)	**Anatoly Nazarov, Ivan Lapatin, Svetlana Paul** Модель работы процессора в условиях конкуренции за вычислительный ресурс (ID 1971)	
	13:00–13:30	**Coffee break**		

Wednesday, September 27, 2023			**B.2.2. Analytical modeling of Distributed Systems and Networks** ***Chairs: Prof. V.Rykov, Dr. D.Kozyrev*** **Room 9**	
	13:30–13:50		**Sergey Sushchenko** Вероятностные характеристики процесса соперничества за полосу пропускания тракта передачи данных на уровне транспортного протокола с селективным режимом повтора (ID 1928)	
	13:50–14:10		**Elizaveta Barabanova, Konstantin Vytovtov, Nickolay Antonov** Mathematical model for analyzing optical switch performance metrics in transient mode (ID 1988)	
	14:10–14:30		**Elizaveta Barabanova, Konstantin Vytovtov, Anastasia Fedorovskaya** Mathematical models for reliability analysis of all-optical switches (ID 1989)	
	14:30–14:50		**Vladimir Vishnevsky, Elizaveta Barabanova, Konstantin Vytovtov, Georgiy Vytovtov** Investigation of tethered unmanned high-altitude platform reliability (ID 1990)	
	14:50–15:10		**Vladimir Rykov, Nika Ivanova** On Reliability Function of a k-out-of-n Model in Case of Quick Recovery of Its Components (ID 2002)	
	15:10–15:30		**Galina Zverkina** About quasi-renewal processes and quasi-regenerative processes (ID 2008)	
	15:30–16:00	**Break**		

Wednesday, September 27, 2023			**B.2.3. Analytical modeling of Distributed Systems and Networks** ***Chairs: Prof. S.Stepanov, Dr. E.Sopin*** **Room 9**	
	16:00–16:20		**Viktor Stepanov, Anastasia Daraseliya, Eduard Sopin** On Comparison of Waiting Buffer Scheduling Methods in a Resource Loss System (ID 1826)	
	16:20–16:40		**Mikhail Stepanov, Sergey Stepanov, Margarita Kanishcheva, Fedor Kroshin** Analysis of Procedures to Ensure the Required QoS Indicators in Multiservice Access Nodes (ID 1866)	
	16:40–17:00		**Vladislav Feoktistov, Dmitry Nikolaev, Yuliya Gaidamaka, Konstantin Samouylov** Задача анализа вероятностных характеристик системы интегрированного доступа и транзита (ID 2025)	
	17:00–17:20		**Faina Moskaleva** Об одной модели обслуживания базовой станицей комбинации двух типов трафика с учетом нарушения прямой видимости (ID 2040)	
	17:20–17:40		**Valentina Klimenok, Vladimir Vishnevsky, Andrey Larionov, Anastasia Gorbunova, Aleksandr Sokolov** Исследование fork-join системы с марковским входным потоком и распределением времени обслуживания фазового типа (ID 2034)	
	17:40–18:00		**Alexey Bergovin, Vladimir Ushakov** Приоритетная система обслуживания с профилактиками прибора в общих предположениях на управляющие последовательности (ID 1867)	

	TIME (Moscow time)	DAY 4: Round Table and Conference Closing
Thursday, September 28, 2023	11:00–12:30	**Round Table with the participation of young scientists: Future networks 2030, artificial intelligence and big data (Круглый стол с участием молодых ученых по вопросам сетей 2030, искуственного интеллекта и больших данных)** ***Chairs: P rof. Vladimir Vishnevsky, Prof. Konstantin Samouylov***
	12:30–12:45	**Conference Closing**